

REMARKS

Claims 1, 3, 4 and 6-20 remain pending in this application. Applicants acknowledge the indication that claims 6-8 and claims 9-17 to the extent that they are dependent on claims 6 or 8 are considered allowed.

Rejection of claims 1-5 under 35 U.S.C. § 102(e) as being anticipated by Belleville (U.S. Patent No. 6,387,517) has been maintained by the Office. The rejection of claims 2 and 5 is clearly moot since these claims have been canceled. According to the Office, Belleville teaches a composition comprising a niobium oxide, zirconium oxide, yttrium oxide and aluminum oxide at column 7, lines 4-15. Although Belleville suggests a possibility that a composition might comprise a mixture of oxides that might be selected from among the recited oxides, Belleville clearly does not teach this combination.

Regarding claims 3 and 4, the Office takes the position that Belleville teaches a composition comprising 60-90% by weight niobium oxide, and 5-20% by weight zirconium oxide, citing column 7, lines 13-14. Belleville clearly does not teach such a composition even though, as the Examiner correctly points out, Belleville teaches that any of the oxides may be present in amounts ranging from 1-99% by weight. However, the mere fact that the claimed materials and proportions may fall within the broad teachings of Belleville, does not establish either anticipation or even obviousness of the claimed invention. The Office has not addressed this argument that the teaching of a genus does not anticipate nor even render obvious a combination within the scope of the broad generic teaching. Applicants cited the decision in *In re Baird*, 16 F.3d 380, 382 (Fed. Cir. 1994) as a clear illustration of the application of this principle. See also

MPEP 2144.08. Similar to the Baird case, Belleville does not describe any species (i.e., specific combination of oxides) or any other preference that uses even one (of a minimum of 3) of the claimed oxides. Further, the broad suggestion of using any oxide in an amount of from 1 to 99% does not begin to suggest what might be appropriate for any particular oxide, either alone, or in combination with other specific oxides as recited in claims 3 and 4. The statement by the Office that absent any evidence of unexpected results, the Belleville reference anticipates the weight percentages of claims 3 and 4 is simply an incorrect statement of the law. As the Examiner should recognize, if the Belleville reference is a proper anticipation of claims 1, 3, and 4, which it is not, evidence of secondary considerations such as unexpected results are irrelevant to patentability. See MPEP 2131.04. Reconsideration and withdrawal of this rejection is requested.

Claims 9-14/1, 9-14/3 and 9-14/4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Belleville in view of Rahilly (U.S. Patent No. 4,116,717). The Office argues that Belleville teaches the use of a vaporization of a compound and deposition of the vapor onto a substrate to create a coating with optical properties. While the Office acknowledges that Belleville lacks reference to the use of sintering of a compound prior to vaporization, Rahilly is argued to teach the use of sintering of antireflective compounds prior to applying the compound to a substrate. While Belleville does acknowledge that conventional methods such as simple or reactive spraying and simple or reactive vaporization by electronic or ionic heating are conventional, not only does Belleville not suggest the use of such a technique with the combination of oxides recited in these claims, Belleville seeks to avoid the conventional physical processes of

sintering and deposition under vacuum, opting instead for the use of an inorganic polymer that is densified and cross-linked by heat treatment at a moderate temperature or by exposure to ultra-violent rays (Belleville at column 6, lines 38-43). Rahilly does teach that a conventional antireflecting coating such as tantalum oxide or silicon oxide can be applied following sintering (column 3, lines 23-28), but it does not teach that other oxides can or should be present when forming the antireflecting coating.

The Office argues that because the two references teach the use of the same basic oxide (tantalum oxide) in the deposition process, one of ordinary skill in the art would recognize that the references are combinable. It is respectfully submitted that this is an insufficient basis to conclude that a person of ordinary skill in the art would be motivated to practice the claimed invention from the combined teachings of these references. Even though there may be a common basic oxide (that is not recited in any of the rejected claims), Rahilly uses a process for deposition of the antireflection film that Belleville seeks to avoid, and there is nothing in Rahilly that would motivate a person skilled in the art to select at least the oxides recited in claims 1, 3 or 4 for such a layer, or to predict that such a layer containing these oxides could be successfully deposited using sintering and vacuum vaporization techniques. The fact that there may be one common oxide hardly provides any evidence that the motivation allegedly based on an oxide could be extrapolated to the recited combination of oxides or that there would be a predictability of success when the other oxides are used in the recited combination.

The Office has further argued that the motivation for combining the two references would be to provide a more uniform composition throughout the layer and

therefore would obtain more precise results from the use of the composition. These bare assertions, absent any factual basis in the teachings of the prior art, are factually and legally insufficient to provide any motivation to combine the references or to establish a predictability of success, particularly since Belleville expressly avoids the very procedure the Office seeks to combine with its teachings. There is absolutely no evidence that a person of ordinary skill in this art would seek to use a sintering and a vaporization procedure with the combination of oxides recited in these claims to obtain a more uniform composition or more precise results. There is certainly no teaching in either Belleville or Rahilly, or any data provided in these references, that would support the Examiner's speculation. It is axiomatic that the teaching or suggestion to make the combination of references suggested by the Examiner must be found in the prior art or based on the knowledge of those skilled in the art. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See also MPEP 2142. As the Office has not established a prima facie case of obviousness, this rejection should be withdrawn.

Claims 15-17/1, 15-17/3, 15-17/4, 19 and 20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Belleville in view of Rahilly as applied to claims 9/1, 12/1 and 18, and further in view of Asai et al. (U.S. Patent No. 5,116,644). In addition to the deficiencies of Belleville and Rahilly et al. discussed above, Asai et al. fails to provide any teaching that would cure these deficiencies or otherwise provide a motivation to select the unique combination of oxides recited in claim 1, or the combination of oxides and the recited proportions recited in claims 3 and 4, to be deposited in the manner recited in claim 9 to meet the limitations of these claims. Accordingly, this rejection should be withdrawn.

Prompt and favorable reconsideration of this application is requested in view of the comments and arguments provide above.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: July 29, 2005

By: Charles E Van Horn
Charles E. Van Horn
Reg. No. 40,266

Attachments: Petition for Extension of Time